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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/507,769	02/18/2000	Richard Kent Passman	D-20866	8623

7590

08/13/2002

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EXAMINER

NGUYEN, KIMBERLY T

ART UNIT

PAPER NUMBER

1774

DATE MAILED: 08/13/2002

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Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/507,769

Applicant(s)

PASSMAN ET AL.

Examiner

Kimberly T. Nguyen

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 09 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

**DETAILED ACTION**

***Response to Amendment***

This action is in response to the amendment submitted on May 9, 2002.

***Claim Objections***

Due to Applicant's amendments, the previous objection of claim 11 is withdrawn.

***Claim Rejections - 35 USC § 112***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office Action.

Due to Applicant's amendments, the previous rejections of claims 1, 3, 5, 9, and 13 are withdrawn.

***Claim Rejections - 35 USC § 103***

**Claims 1-2 and 4-10** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatch et al., U.S. Pat. No. 5,840,386 as previously stated in the Office Action submitted on November 29, 2001.

**Claims 1-12 and 14-16** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatch et al., U.S. Pat. No. 5,840,386 in view of Hess et al., U.S. Pat. No. 3,698,053 as previously stated in the Office Action submitted on November 29, 2001.

**Claims 1, 3, 11, and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hatch et al., U.S. Pat. No. 5,840,386 as previously stated in the Office Action submitted on November 29, 2001.

***Response to Arguments***

Applicants' argument filed May 9, 2002 have been fully considered but they are not persuasive.

On pages 2-3, Applicants argue that Hatch et al. does not disclose or suggest a first polymer layer free of fibers and particulate, a second polymer layer containing particulate or a thermal spray layer coating the second polymer layer. Examiner disagrees. Hatch shows at least one compressible intermediate layer of polyurethane elastomer (first polymeric layer) (column 3, lines 50-51 and column 5, lines 54-56), a reinforced intermediate tube comprising polyurethane elastomer reinforced with glass fiber (silicon oxide particulate in a second polymeric layer) (claim 1 and column 6, lines 26-29), and a thermally sprayed coating (column 4, lines 32-36). Hatch does not show that the at least one compressible intermediate layer (first polymeric layer) comprises any fibers and, absent any evidence to the contrary, would be "free of fibers" as in Applicant's instant invention.

On page 3, Applicant argues that Hatch et al. and Hess et al. do not disclose or suggest a first polymer layer free of fibers and particulate, a second polymer layer containing particulate with a thermal spray layer coating the second polymer layer. Examiner disagrees. As shown above, Hatch shows at least one compressible intermediate layer of polyurethane elastomer (first polymeric multi-layer) (column 3, lines 50-51 and column 5, lines 54-56), a reinforced intermediate tube comprising polyurethane elastomer reinforced with glass fiber (silicon oxide particulate in a second polymeric layer) (claim 1 and column 6, lines 26-29), and a thermally sprayed coating (column 4, lines 32-36). Hatch does not show that the at least one compressible intermediate layer (first polymeric layer) comprises any fibers and, absent any evidence to the contrary, would be "free of fibers" as in Applicant's instant invention.

On page 3, Applicant argues that Fujita et al. does not disclose using a bisphenol F-type epichlorohydrin and diethylenetriamine resin for bonding a particulate-containing polymer to a fiber reinforced composite because the resin has excellent properties for bonding and withstands the indirect thermal stresses induced from thermal spraying. Examiner is not persuaded. Fujita is used in combination with Hatch and Hess to show that it is obvious to use the epoxy resin because it shown to be known in the art that the resin has excellent tensile characteristics and is widely used in composite materials such as carbon fiber reinforced plastics (column 1, lines 4-62). Further, in response to Applicant's argument that Fujita does not specifically disclose using the resin to bond a particulate-containing polymer to a fiber reinforced composite, a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. It does not matter what the intended use is in an article claim. The combination of the inventions in Hatch, Hess, and Fujita show Applicant's invention without any structural differences. Thus, such a combination would be capable of "bonding particulate-containing polymer to a fiber reinforced composite," which is the intended use of Applicants' invention. The prior art structure of Hatch, Hess, and Fujita thus meets the claims of Applicant's disclosure.

### ***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO**

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MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kimberly T. Nguyen whose telephone number is (703) 308-8176. The examiner can normally be reached on Monday to Friday, except on every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H. Kelly can be reached on (703) 308-0449. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Kimberly T. Nguyen  
Examiner  
August 6, 2002

CYNTHIA H. KELLY  
SUPERVISORY PATENT EXAMINER  
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